

#### **O.R.S KIDS WHITEPAPER**



# WHY KIDS SHOULD TAKE O.R.S HYDRATION TABLETS FOR REHYDRATION

From our expert team of pharmacists and healthcare professionals



# WHY KIDS ARE MORE SUSCEPTIBLE TO DEHYDRATION

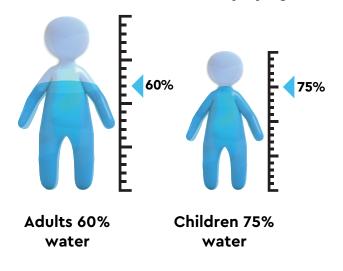
Water is a vital component of a child's body, accounting for approximately 75% of their body weight. However, even a slight decrease in hydration levels can significantly impact a child's overall health and well-being.

This is because children have higher water requirements in relation to their body weight, they also have a lower heat tolerance than adults making them more susceptible to dehydration and they are often unable to notice the signs of dehydration, often forgetting to drink enough water. All of these factors lead to an increased risk of dehydration among children.

Even a mild reduction in hydration levels can have negative consequences for a child's physical and cognitive health.

In such cases, hydration solutions can play a crucial role in helping children rehydrate quickly and maintain optimal hydration levels.

A study found that nearly two in three children are not drinking enough at breakfast time to be properly hydrated. Water in the human body by age



A team from Sheffield University Medical School looked at what the children were eating and drinking before leaving for school.

According to EFSA, 80% of people in the UK are not adequately hydrated. O.R.S is here to meet a clear need by making scientifically proven hydration simple.

> The European Food Safety Authority advises Children between 3-8: between 1.1-1.3 litres of water daily Boys aged 9-3: between 1.5-1.7 litres of water daily Girls aged 9-13: between 1.3-1.5 litres of water daily

# When your little ones might need hydration support

We lose water mainly by sweating, crying, breathing, and urinating. Dehydration can often develop due to excessive sweating and other scenarios. Climate, physical activity, food, and other factors can affect dehydration severity.

There are a number of times that children might loose more fluids and salts than normal and need hydration support.





# ABOUT O.R.S HYDRATION

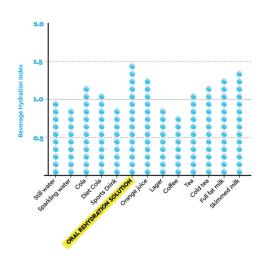
## Why O.R.S Hydration Tablets are effective:

The scientifically balanced combination of electrolytes and a small amount of glucose (17.2 kcal) has been shown to be the most effective way to rehydrate quickly and keep you hydrated for longer than water alone can.

#### **O.R.S Hydration Tablets**

are formulated by pharmacists to follow World Health Organization oral rehydration solution guidelines.

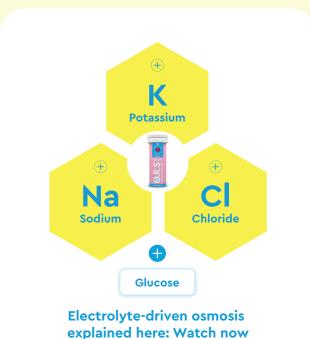
We took over 50 rounds of taste testing to get our flavours just right.



O.R.S offers the most effective hydration method as it has the highest hydration index when compared to other drinks.

Source: American Journal of Clinical Nutrition, 2015

The American Journal of CLINICAL NUTRITION



electrolytes and glucose that work together to hydrate you faster through a process called electrolyte-driven osmosis.

**O.R.S Hydration Tablets contain three essential** 

#### Sodium

Regulates the body's hydration balance especially after intense activity.

**Potassium** After intense activity, maintains a positive fluid balance and helps with muscle function.

**Chloride** Helps regulate muscle fibre function.

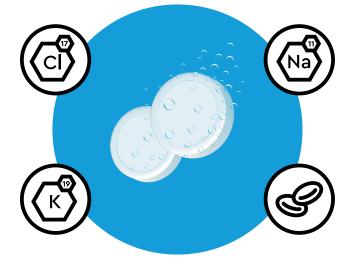
**Glucose** Small levels are essential for absorption of essential electrolytes.



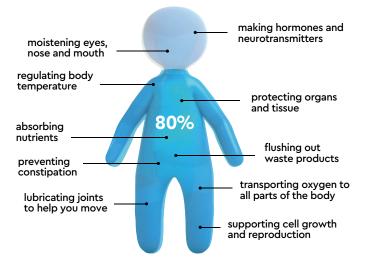


### Why are electrolyte drinks are the most effective solution for children to hydrate?

When children become dehydrated, they lose not only water, but also essential electrolytes like sodium, potassium, and chloride. Replenishing these electrolytes is vital to restoring proper hydration levels. This is down to a process that we like to call electrolyte-driven osmosis. Electrolyte-driven osmosis helps your body absorb water faster by transporting water and electrolytes over the intestinal wall and into the bloodstream. When mixed with water. In simple terms, this process allows your body to absorb water faster by moving water and electrolytes across the intestinal wall and into the bloodstream. This process helps the body quickly absorb the necessary fluids and electrolytes needed to rehydrate.



## The role of hydration



### What Do Electrolytes Do?

The primary need for electrolytes in the body is hydration, or ensuring that the water you consume reaches the areas where it is needed. Without electrolytes, most of this water would pass past you without providing any benefit.

Your body uses electrolytes in two primary ways: intracellularly and extracellularly (extracellular). Extracellular electrolytes help nerve and muscle fibre impulses travel. To function properly, you must balance intracellular and extracellular electrolytes.

Electrolytes maintain homeostasis in your cells: they keep your cells hydrated, cold, and in optimal condition for the vital task they perform.

Electrolytes keep cells hydrated, cool, and ready for their important tasks.

### How Do We Lose Electrolytes?

The body is essentially a large electrical circuit: nerves and muscles (from the heart to the pectorals to the gluteus maximus) pulse with tiny electrical signals that translate into decisions and actions, from sprinting a mile to your heart's regular beat, that are beyond our conscious control. Electrolytes must be transported throughout the body to manage these functions. Electrolytes are lost through urine, blood, and, most importantly, sweating. We can sweat 1.5 to 6 litres per hour! Sweating cools the body and hydrates the skin, but as we lose water, the body tries to maintain a proper ratio of electrolytes and water, so we end up depleting electrolytes. Giving the body more water will just make it sweat more, unless electrolytes are also replaced.



# O.R.S HYDRATION TABLETS FOR CHILDREN

O.R.S. Hydration Tablets are a convenient and effective approach for children to restore lost fluids and electrolytes when they need it most. They dissolve quickly in water and the tasty strawberry flavour has proven to be a hit among children!

## WHY O.R.S HYDRATION?

The UK Department of Health has recommended O.R.S. Hydration Tablets as a suitable alternative to Dioralyte.

O.R.S Hydration Tablets follow World Health Organization guidelines for rehydration. O.R.S Hydration Tablets are the only hydration tablet that can be prescribed by doctors and the NHS.

Our trusted formula has was created by pharmacists and has been hydrating globally ever since.

### **O.R.S Dosage for Children**

#### Over 6

For general hydration of children over 6 years old, dissolve 2 tablets in 200ml of water.

#### For children between 3 to 6 years of age

The standard mixture can be used (2 tablets in 200ml of water). For a smaller volume of liquid, use one tablet in 100ml to prevent wasted solution. The child can drink 10ml of solution per kg of body weight in small sips.

#### For children under 3 years of age

The dosage remains the same (10ml per kg of body weight) and is best given in small sips We recommend using O.R.S. under the recommendation of a doctor or pharmacist for children under 3.

Once prepared, the solution should be consumed within 8 hours or within 24 hours if refrigerated. Consume as needed.

If using O.R.S. due to acute illness such as diarrhoea, upset stomach, or viral infection, it is recommended that O.R.S. be used after speaking to a doctor or pharmacist first.



# REFERENCES AND FURTHER READING

### **Related links**

- History of development of oral rehydration therapy – PubMed (nih.gov)
- https://www.nhsinformation.scot/ illnesses-and-conditions/nutritional/ dehydration
- Dehydration Symptoms and causes – Mayo Clinic
- Dehydration NHS (www.nhs.uk)
- Hydrated skin and the pinch test Caidr
- https://caidr.com/article/hydration-inanutshell!36490388-dc64-488e-b903-030145b20c39

- https://caidr.com/article/hydrationandmental-performance!d596ba62-7a11-4048-9cfd- 0153f080a3c1
- https://caidr.com/condition/ hydrationdehydration-and-heatstroke! 4637fe46-3463-40a3-a6c9- f50120af5cc8
- https://www.who.int/publicationsdetailredirect/WHO-FCH-CAH-06.1
- ORAL REHYDRATION SALTS = ORS | MSF Medical Guidelines
- Blog O.R.S Hydration (orshydration.com)

